

UTILITIES AND ENERGY RETROFIT

Energy conservation, replacement or upgrading of inadequate utility service, and introduction or upgrading of mechanical systems are universal concerns of property owners today. In the historic districts it is important to ensure that such concerns are addressed in ways that do not damage or diminish the historic character of the building, the site, or the district.

In Asheville's historic districts a variety of energy-conserving site and building features illustrates the sensibility of an earlier era to climate and energy efficiency. Thoughtfully located shade trees buffer residences and sidewalks from the hot summer sun. Projecting porches provide shaded outdoor space and lessen the impact of harsh sunlight on the building's interior. Operable windows, shutters, and awnings allow occupants to control the introduction of sunlight and breezes more specifically within the building. Commercial buildings often capture daylight through storefront transoms, lightwells, and skylights. An understanding of how such historic features enhance energy efficiency is critical to maximizing the energy efficiency of historic buildings.

Things to Consider As You Plan

In considering energy retrofit options, the property owner should be sure that the inherent energy-conserving features of the building are being used and maintained. Consideration should also be given to the replacement of lost shade trees or the introduction of other carefully located new shade trees. Beyond those steps, typical retrofit measures include introduction of storm windows, storm doors, additional weatherstripping, insulation, and more energy-efficient mechanical systems. All retrofit measures must be reviewed with their impact on the historic character of the building and the district in mind.

Following any necessary repair of windows to ensure their weather tightness, additional efficiency may be realized with the introduction of exterior storm windows. Relatively unobtrusive, narrow-profile exterior storm windows that do not obscure the window itself, that are carefully installed to prevent damage to the sill or the frame, and that are finished in a painted or a baked-enamel color compatible with the sash color are fairly common in the historic districts. To retain the opportunity to open the windows, the property owner should remember to select operable storm units that align with the sash rails of the window. Before aluminum-colored storm sash is painted, it should always be primed with a zinc chromate primer to ensure that the finish paint will bond. If a property owner chooses interior storm windows, they should be tension-mounted with airtight gaskets. On both exterior and interior storm windows, the ventilating holes must be kept open to prevent condensation from damaging the window or the sill. Selection and installation of new screen or storm doors shall follow the guidelines for exterior storm windows.

New mechanical or communication systems that include outside units or equipment, such as condensers, ventilators, solar

collectors, satellite dishes, and large antennas, shall be located and installed so that they do not damage or diminish the historic character of the building, site, or district. An inconspicuously located outdoor unit can often be further screened by plantings or fences.

Although utility lines and poles have long been a part of the district's streetscapes, attention should also be given to consolidating old and new utility and communication lines where possible to avoid overpowering the streetscape with an ever-expanding wirescape. If a new or upgraded power supply will necessitate an additional pole and overhead wires, the use of underground cables may be preferable to prevent the visual intrusion.

UTILITIES AND ENERGY RETROFIT: GUIDELINES

1. Retain and preserve the inherent energy-conserving features of historic buildings and their sites, including shade trees, porches, awnings, and operable windows, transoms, shutters, and blinds.
2. Increase the thermal efficiency of historic buildings by observing appropriate traditional practices, such as weatherstripping and caulking, and by introducing energy-efficient features, such as awnings, operable shutters, and storm windows and doors, where appropriate.
3. If a new mechanical system is needed, install it so that it causes the least amount of alteration to the building's exterior elevations, historic building fabric, and site features.
4. If desired, full-length narrow-profile exterior or interior storm windows that do not obscure or damage the existing sash and frame are allowed. Select exterior storm windows with a painted or baked-enamel finish color that is compatible with the sash color. For double-hung windows, select operable storm windows with dividers that align with the existing sash.
5. If desired, introduce full-light storm doors constructed of wood or aluminum with a baked-enamel finish that do not obscure or damage the existing door and frame. Select storm doors with a painted, stained, or baked-enamel finish color that is compatible with the color of the existing door.
6. Replace deteriorated or missing wooden shutters with matching new units sized to fit the opening and mounted so that they can be opened.
7. If desired and where historically appropriate, install fabric awnings over window, door, storefront, or porch openings with care to ensure that historic features are not damaged or obscured.
8. Locate new mechanical equipment and utilities, including heating and air-conditioning units, meters, exposed pipes, and fuel tanks, in the most inconspicuous area, usually along a building's rear elevation. Screen them from view with plantings.
9. In general, the introduction of underground utility lines to reduce the intrusion of additional overhead lines and poles is encouraged. However, in trenching, take care to protect the roots of large trees and archaeological resources.
10. When necessary to install a portable window air conditioner locate units on rear elevation or on inconspicuous side elevations.

11. Skylights, ventilators, solar collectors, antennas, satellite dishes, or mechanical equipment shall not be placed in locations that compromise character-defining roofs, or on roof slopes that are visible from the street.
12. Contemporary communication equipment that is inconsistent with the historic character of the districts, including large-scale antennas and satellite dishes, shall not be placed in locations visible from the street.

ACCESSIBILITY, HEALTH, AND SAFETY CONSIDERATIONS

A need for public access to, a change in use of, or a substantial rehabilitation of a historic building may necessitate compliance with current standards for life safety and accessibility. Both the North Carolina State Building Code and the federal Americans with Disabilities Act of 1990 include some flexibility in compliance when a historic building is involved.

Things to Consider As You Plan

When changes to a building are necessary, the property owner must give careful consideration to how the changes can be incorporated without compromising the integrity of the historic building, its character-defining features, or its site. The commission staff should be consulted early in the planning stages for assistance on such projects.

Because of the characteristic raised foundation of many early Asheville buildings, accessibility for persons with disabilities often requires the introduction of a ramp or a lift to the first-floor level. Safety codes may also dictate additional exits and/or a fire stair. The introduction of railings, handrails, or other safety features may be needed as well. Complying with such requirements in ways that are sensitive to the historic character of the building and the site demands creative design solutions developed with input from local code officials, representatives of local disability groups, and historic preservation specialists. Whether the modifications are large or small, however, with respect to the long-term preservation of the historic building, temporary or reversible alternatives are preferable to permanent or irreversible ones.

ACCESSIBILITY, HEALTH, AND SAFETY CONSIDERATIONS: GUIDELINES

1. In considering changes to a historic building, review accessibility and life-safety code implications to determine if the proposed changes are compatible with the building's historic character and setting or will compromise them.
2. Meet accessibility and life-safety building code requirements in such a way that the historic site and its character-defining features are preserved.
3. Meet accessibility and life-safety building code requirements in such a way that the historic building's character-defining facades, features, and finishes are preserved.
4. Determine appropriate solutions to accessibility with input from historic preservation specialists and local disability groups.
5. If needed, introduce new or additional means of access that are reversible and that do not compromise the original design of a historic entrance or porch.
6. Work with code officials in exploring alternative methods of equal or superior effectiveness in meeting safety code requirements while preserving significant historic features.
7. Locate fire doors, exterior fire stairs, or elevator additions on rear or non-character-defining elevations. Design such elements to be compatible in character, materials, scale, proportion, and finish with the historic building.

Demolition

Demolition of buildings in the Montford Historic District is discouraged except where necessary to secure the public safety. If a building must be demolished, the Historic Resources Commission may order the demolition delayed for up to 365 days. During this period, the Commission will decide if the building can be moved; if it contributes to the historic character of the neighborhood; if there are potential owners willing to restore the building; if the building can be adapted to serve its owner's needs; or if the building is structurally feasible for reuse.